



July 2011

Fatal Injuries Due to Motor Vehicle Crashes Miami-Dade Co. Children Aged 0-17 Years, 2000-2009

Miami-Dade County Injury Facts

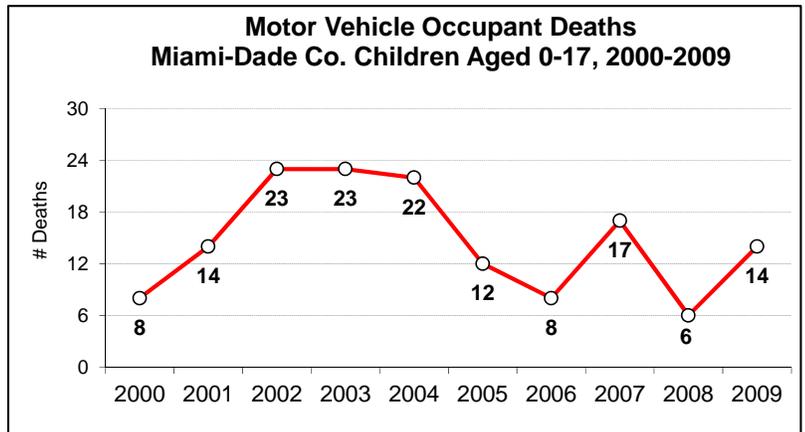


Being an occupant in a motor vehicle crash has been the leading cause of fatal injury among children aged 0-17 years in Miami-Dade County since 2000.

This fact sheet reviews the trends in motor vehicle crashes (MVC) that resulted in deaths to Miami-Dade County children age 0-17 over the ten-year period 2000-2009.

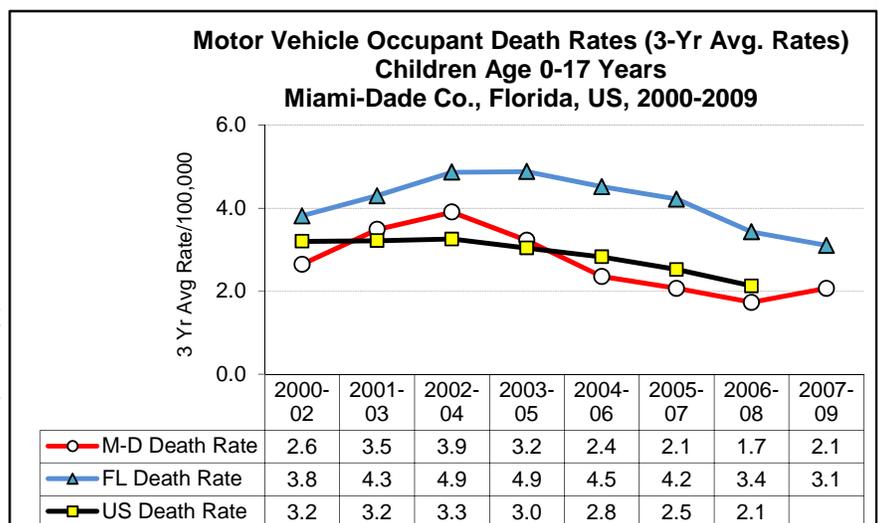
Trends for Fatal Child MVC Deaths

- Between 2000-2009, 147 Miami-Dade County children aged 0-17 years died as occupants in MVCs. After three years of unchanged incidence between 2002-2004, deaths declined sharply in 2005 and have fluctuated since 2006.



The 10-year trends for fatal MVC injury rates were examined using rolling 3-year average rates. Three-year average rates are used because they are more stable than annual rates.

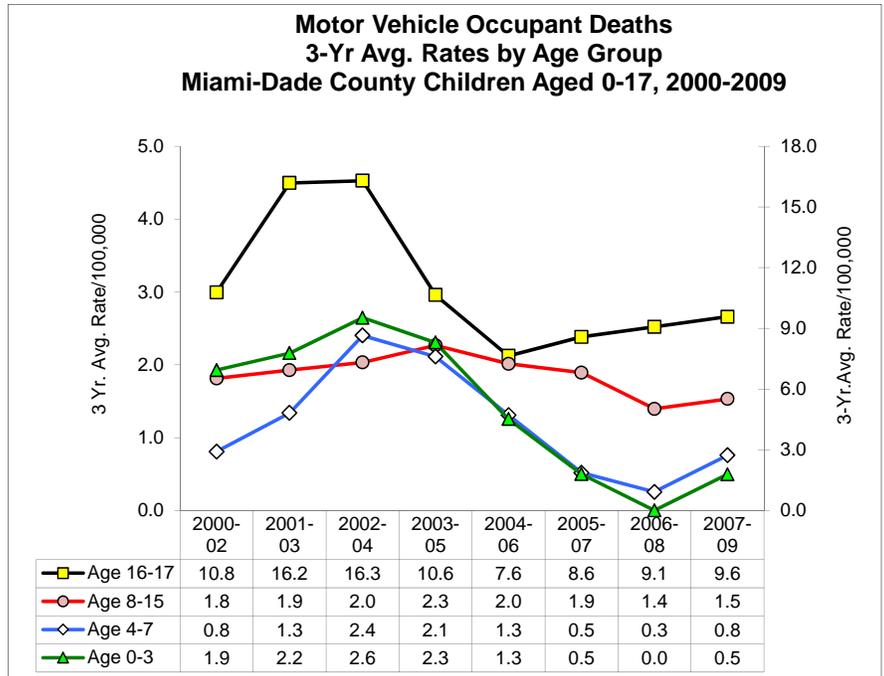
- The county's 3-year avg. MVC mortality rate has declined 47% since 2002-04 but the 2007-09 rate marked the first increase in this rate since 2002-04.
- The county's child MVC death rate has been lower than the state rate for every 3-year period.
- The national child MVC death rate has been similar to the county rate since 2003-05.



Trends in Fatal MVC Injury Rates by Age Group

The trends for fatal MVC injury rates were examined for four child age groups.

- Fatal MVC injury rates for ages 16-17 (black line) declined 53% between 2002-04 and 2004-06. Since 2004-06, the fatality rate has been slowly increasing each 3-year period.
- Fatal MVC injury rates for ages 8-15 (red line) have declined 16% between 2000-02 and 2007-09.
- Ages 4-7 (blue line) corresponds to the age when most children should be using booster seats or car seats with harnesses. Ages 0-3 (green line) represents the age children must be properly restrained in car seats with harnesses.

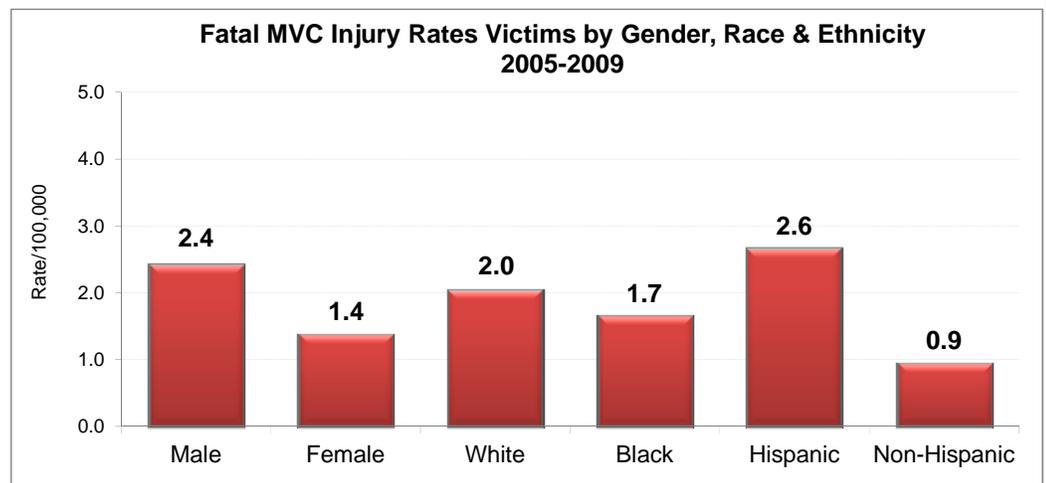


Both age groups demonstrated similar fatal MVC patterns, reaching their peak injury rates in 2002-04, then both experiencing sharp declines between 2002-04 and 2006-08 (age 0-3 experienced no MVC deaths and age 4-7 only one MVC death during the 3 years 2006-08). Both age groups increased slightly in 2007-09.

Trends in Fatal MVC Injury Rates by Gender & Race

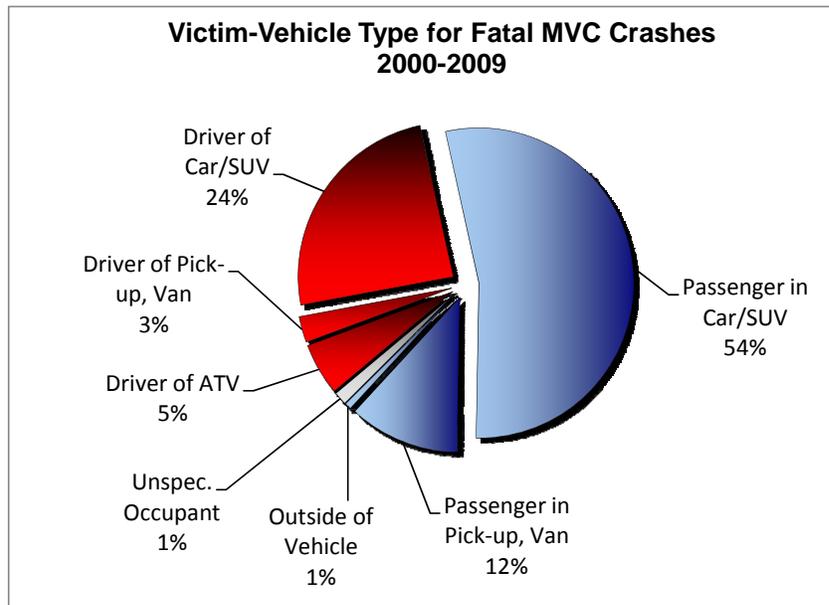
Over the 5 years 2005-2009:

- The fatal MVC injury rate for male children was nearly twice the rate for female children.
- White children had slightly higher fatal MVC injury rates than black children.
- The fatal MVC injury rate for Hispanic children was nearly 3-times greater than the non-Hispanic rate.

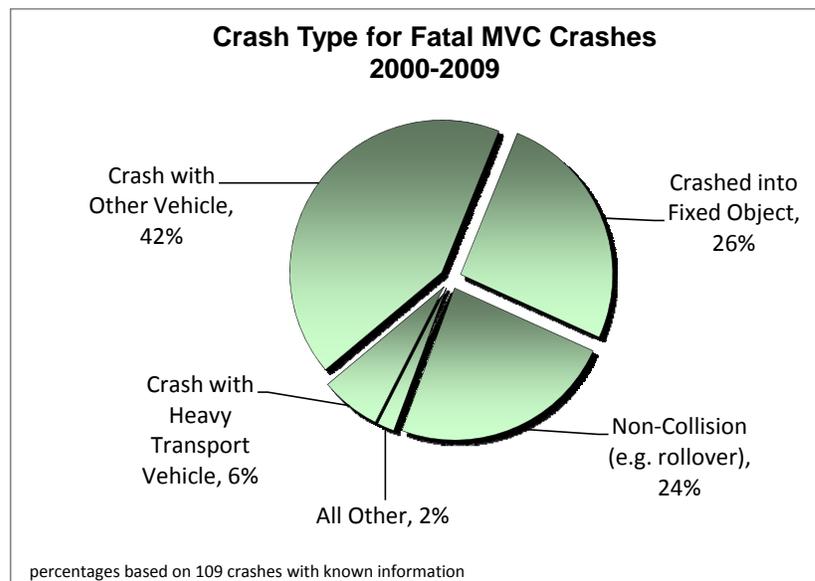


Crash Characteristics for Fatal Child MVC Victims

- Among the 147 fatal MVC victims, 66% were passengers, 33% were drivers and 1% was unknown. Information on child restraint use is not available from death certificate data.
- 80% of the fatal crashes occurred in cars or SUVs, 14% in pickup trucks or vans, 5% were off-road vehicles such as ATVs.

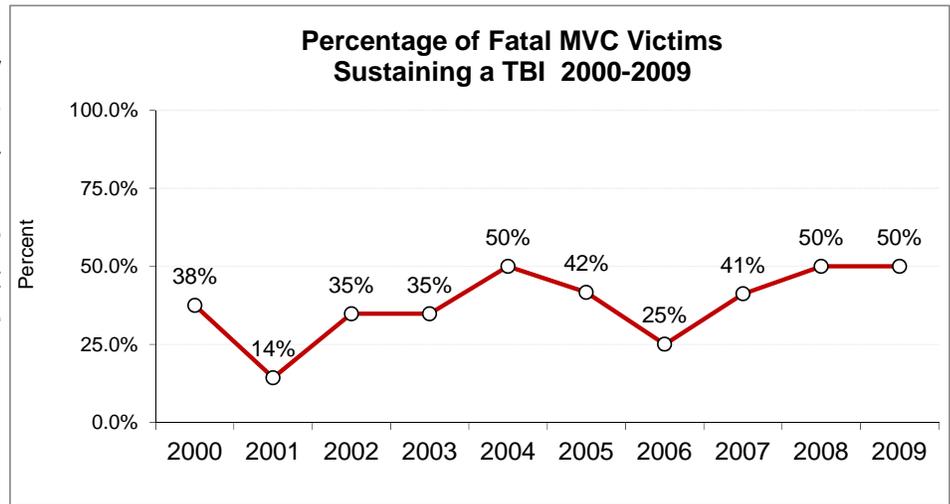


- Only 109 of 147 fatal crashes contained information on the type of crash. Forty-two percent of these victims were involved a crash with a car, pickup truck or van, another 26% involved crashing into a fixed object, 24% were drivers involved in a non-collision crash (most commonly vehicle rollovers) and 6% were crashes that involved heavy transport vehicles or buses.

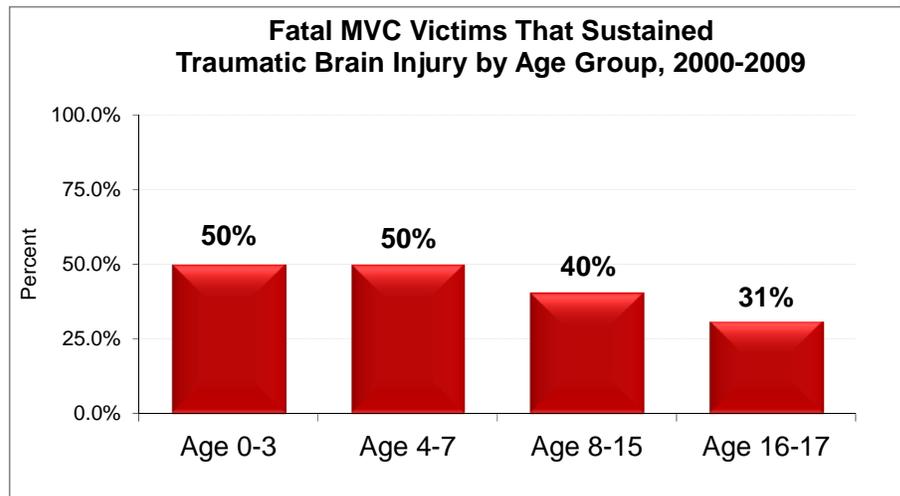


Traumatic Brain Injury Incidence for Fatal Child MVC Victims

- Overall, 38% of MVC injury victims suffered a TBI. The percentage of fatal MVCs resulting in TBI was lowest in the beginning of the decade and has reached its highest rate of 50% in three of the past six years.

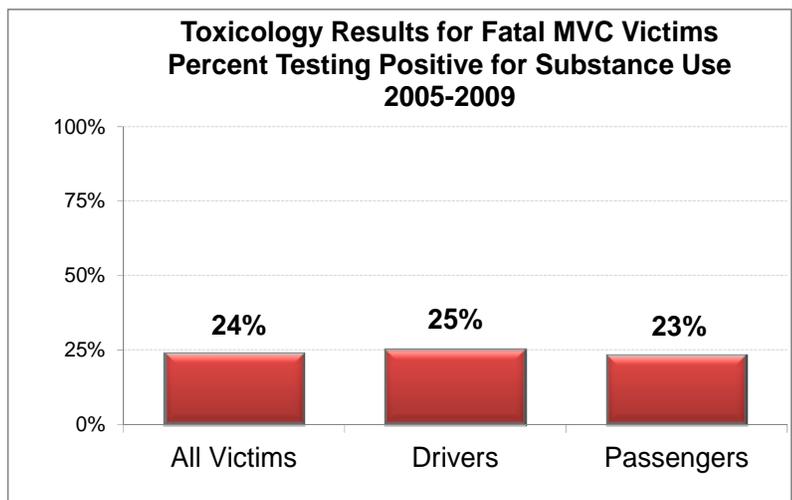


- The incidence of TBI among child MVC fatalities decreased as the victims aged.
- One-half of the victims aged 0-7 suffered a MVC-related TBI.



Substance Use for Fatal MVC Victims

- Toxicology results from the medical examiner have been available since 2005. Since 2005, 46 of the 57 MVC victims were tested for substance use. The other 11 victims were either not tested or died out of the county.
- 11/46 (24%) tested victims were positive; six for alcohol use and five for drug use.
 - Five of 20 drivers (25%) were positive; age range = 15-17 yrs.
 - Six of 26 passengers (23%) were positive; age range = 8-17 yrs.

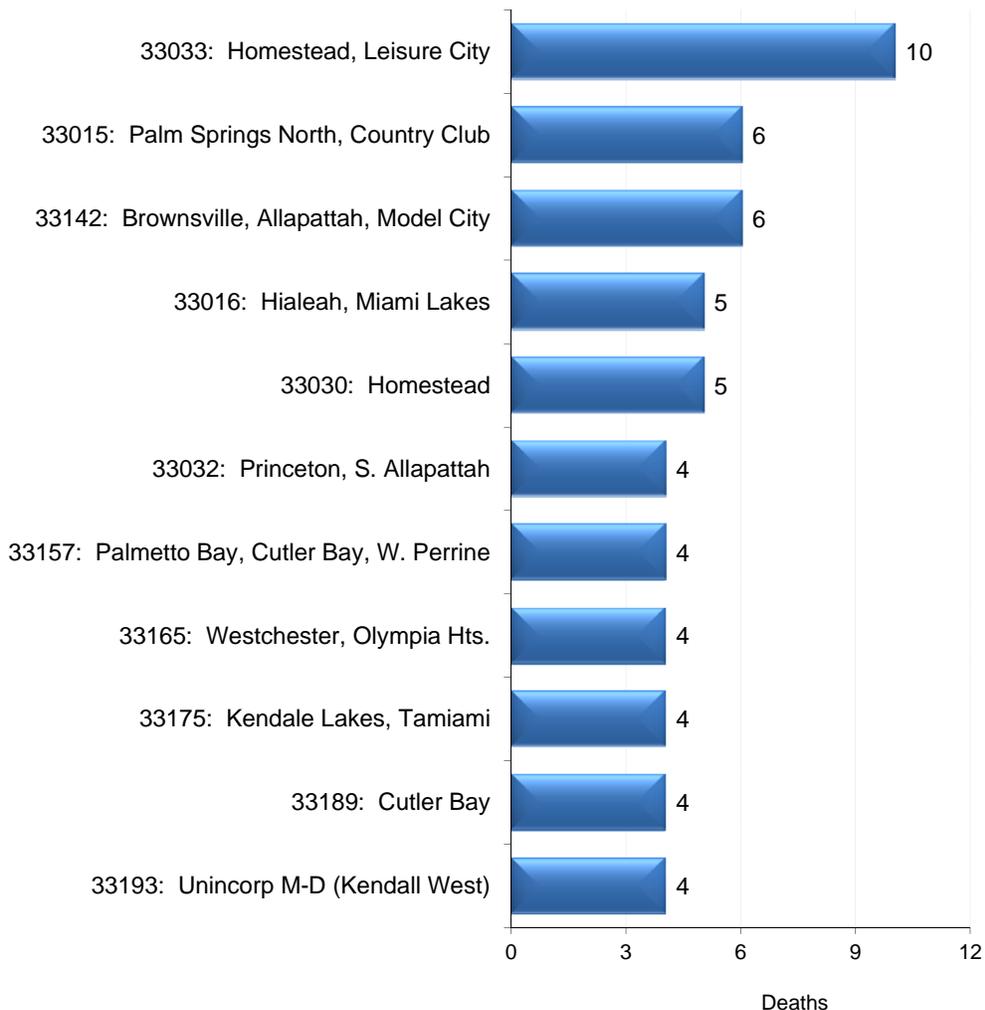


Zip Code of Residence for Child MVC Fatalities, 2000-2009

The graph below shows the 11 county zip codes that have experienced at least 4 fatal MVC injuries to their children since 2000. Mortality rates could not be calculated for zip codes because of the small number of deaths in individual zip codes.

- Two zip codes in the Homestead area accounted for 15 child MVC deaths in the county since 2000: 33033 (10 deaths) and 33030 (5 deaths).
- The zip code 33015, which includes the communities Palm Springs North and Country Club (north of Hialeah), and zip code 33142 (Brownsville, Allapattah, Model City) both experienced 6 child MVC deaths.
- The community of Cutler Bay is included within the zip codes 33157 and 33189 which have experienced 9 child MVC deaths since 2000.

MVC-Occupant Deaths to Residents Aged 0-17 Years by Miami-Dade Co. Zip Code of Residence, 2000-2009



Prevention Points

- Everybody needs a child safety seat, booster seat, or safety belt - on every ride.
- Not properly restraining a child is against the law and punishable by a fine.
- Never hold a child on your lap in a car! You could crush him/her in a crash, or the child may be torn from your arms. You are not as strong as the force of the vehicle and its speed.
- All children under 13 years old should ride properly restrained in the back seat:
 - Children 0-24 months should be in rear facing car seats.
 - Children older than 24 months and less than 40 pounds in weight should travel in a forward facing car seat with a harness.
 - Children more than 40 pounds should use a booster seat with the car's lap/shoulder belt or a car seat with a five point harness that accommodates children over 40 pounds.
 - Children between 8-11 years old or at least 4'9" tall are ready to use the adult lap/shoulder belt if:
 1. The shoulder belt lies across the middle shoulder and chest (not against the neck).
 2. The lap belt lies low across the upper thighs (not across the stomach).
 3. The child is tall enough to sit against the vehicle seat back with knees bent naturally over the edge of the seat without slouching and can stay in that position throughout the trip.
- Each child must be in a car seat sized according to the child's age, height and weight. Check with a Certified Passenger Safety Technician to help you choose the correct car seat and make sure you are using it properly. Child Passenger Safety Programs and Technicians are available in Miami-Dade County at:
 1. Injury Free Coalition for Kids of Miami 305-243-3928
 2. City of Miami Beach Fire Rescue Child Passenger Safety Program 305-673-4935
 3. Florida Highway Patrol Child Car Seat Program 305-470-2260
 4. Miami Dade Fire Rescue Child Car Seat Program 786-331-4927
 5. Miami Dade Police Department Child Car Seat Program 305-471-3055
 6. To locate a child safety seat inspection station outside the Miami area call 866-SEAT-CHECK

Produced by the Miami-Dade County Injury Surveillance System

Data Sources: Death Certificates, Office of Vital Statistics, FL Dept. of Health
 Medical Examiner Records, Miami County Medical Examiner Dept.
 Hospital Discharge Data, Agency for Health Care Administration
 PHONE (IFCK): 305-804-7212 (MDCHD): 305-470-5649
 E-MAIL: stephen.dearwater@jhsmiami.org
 WEBSITE: <http://dadehealth.org/injury/INJURYintro.asp>

